

Date: Wednesday, 10/10/2007 11:04:16 AM
User: Kim Johnston

Process Sheet

Customer	: CU-DAR001	Dart Helicopters Services	Drawing Name	: LONG STEP ASSEMBLY HIGH SKID LH
Job Number	: 35087			
Estimate Number	: 10270			
P.O. Number	: <i>N/A</i>		Part Number	: D350591311
This Issue	: 10/10/2007	S.O. No. : <i>N/A</i>	Drawing Number	: D3272 REV B
Prsht Rev.	: NC		Project Number	: <i>N/A</i>
First Issue	: <i>N/A</i>	Type : LARGE FAB ASSY	Drawing Revision	: B
Previous Run	: 35068		Material	: <i>N/A</i>
Written By	: <u><i>[Signature]</i></u>		Due Date	: 11/15/2007
Checked & Approved By	: <u><i>[Signature]</i></u>		Qty:	10
Comment	: Est Rev:A 04.03.22	New issue KJ/RF	Um:	Each
	: Est Rev:B 07-06-09	Added D3272-1 JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-311 CHG001

2.0	D32721	STEP
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

STEP

BATCH: D 34950

3.0	D30671	End Plate
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
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1 D3067-1 End Plate 334454

4.0	D32191	Support
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Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
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2 D3219-1 Support **B35080**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Job Number: 35087

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod M105058
M105138

3-Grind End Plate flush

KE 07-11-08 10
KE 07-11-08 10
SAD 07-11-12 (10)

6.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 07-11-13 (13)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07-11-13 (13)
LH

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

07-11-13 (13)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

07-11-14

10.0

D3065041

Step Leg Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number Description Batch
1 D3065-041 Step Leg Assy 233510

KE 07-11-15 10

11.0

D30661

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty Part Number Description Batch
2 D3066-1 Spacer 334447

KE 07-11-15 10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 35087

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description:

12.0

MS20600AD4W4

Rivets



Comment: Qty.: 16.0000 Each(s)/Unit Total: 160.0000 Each(s)

Pick:

Qty Part Number Description Batch

16 MS20600AD4W4 Rivet m105792

PH 07-11-15 10

13.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Assemble Leg Assembly as per Dwg D3272.

Leave one rivet out until welding is complete.

PH 07-11-15 10

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

PH 11-15 @ 214

15.0

D30671

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3067-1 End Plate B35079

PH 07-11-15 10

16.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Aft end for welding

2-Inspect for foreign object as per QSI 024

3-Weld Aft End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod m105058

4-Grind End Plate flush

5-Install last rivet as per Dwg.

PH 07-11-15 10

PH 07-11-15 10

PH 07-11-15 10

SAD 07-11-17 10
Q.M. 07-11-19 10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

10 07-11-2019 (10)

18.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

6 07/11/19 (10x)

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

touch up alodine

M. J. / B.R. 07/11/19

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M105914 07/11/19

M. J. / B.R. (10x LH)

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3272 and QSI 005 4.4

m106030

HS / FL. 07-11-19 (10x LH)

22.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: Inspect Powder Coat and Wing Walk

7/11/20 10x SP

23.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

7/11/20 (10x) (50)

24.0

D22303

Mounting Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total: 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 D2230-3 Mounting Lug

B35013

AS 07/11/19 (10x)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 35087

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

D2618

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2618

Bushing

B33991

AS 07/11/19

(10X)

26.0

D2856400

Abrasion Strip



Comment: Qty.: 0.6000 f(s)/Unit Total : 6.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2856-400-720 Abrasion Strip

B34642

AS 07/11/19

(10X)

27.0

D32351

Mounting Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D3235-1

Mounting Lug

B30996

AS 07/11/19

(10X)

28.0

D3278041

Support Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 D3278-041

Support Assembly

B35287

AS 07/11/19

(10X)

29.0

AN335A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN3-35A

Bolt

M105408

AS 07/11/19

(10X)

30.0

AN413A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN4-13A

Bolt

M105906

AS 07/11/19

(10X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 35087

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

AN536A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN5-36A

Bolt

M105906(x19)

M105953(x1)

KS 07/11/19 (10X)

32.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10

Washer

M105792

KS 07/11/19 (10X)

33.0

AN960JD416

Washer



Comment: Qty.: 16.0000 Each(s)/Unit Total : 160.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

16 AN960JD416

Washer

M105426

KS 07/11/19 (10X)

34.0

AN960JD516

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD516

Washer

M104156

KS 07/11/19 (10X)

35.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L3

Nut (or -3)

M104625

KS 07/11/19 (10X)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: D Date: 21/11/21
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Job Number: 35087

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

36.0

MS21042L4

Nut



Comment: Qty.: 8.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 MS21042L4

Nut (or -4)

M105054

KS 07/11/19

(10X)

37.0

MS21042L5

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L5

Nut (or -5)

M105430

KS 07/11/19

(10X)

38.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

2-11-21 (10)

39.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-311

Location:

B

7/11/21

SP

(10X)

40.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(10)
2-11-21

Job Completion



U 07-11-22

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>GP</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

RELEASED07 06 04 *[Signature]*

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

GENERAL NOTES:

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

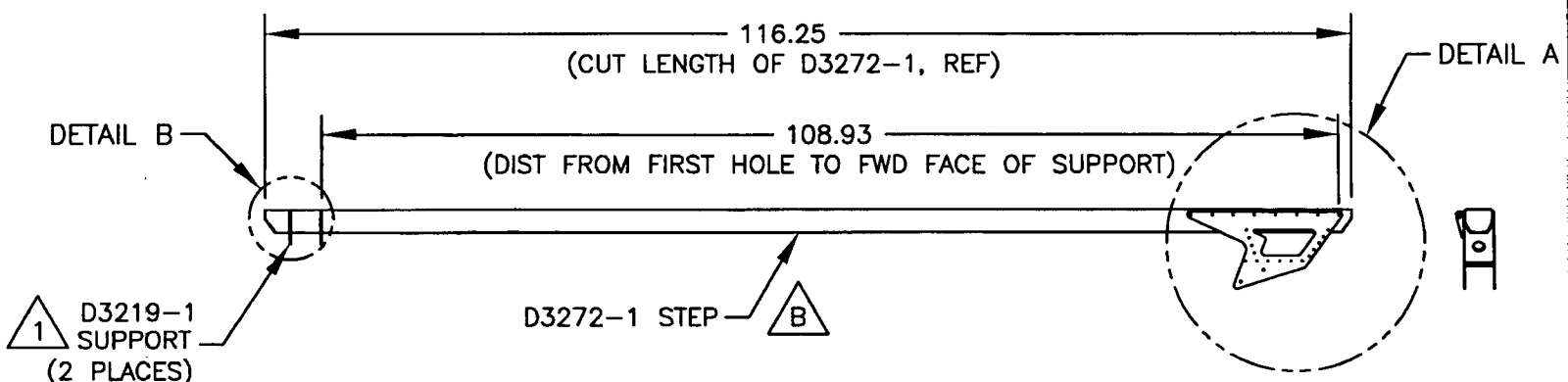
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WORK ORDER
NO. 35087

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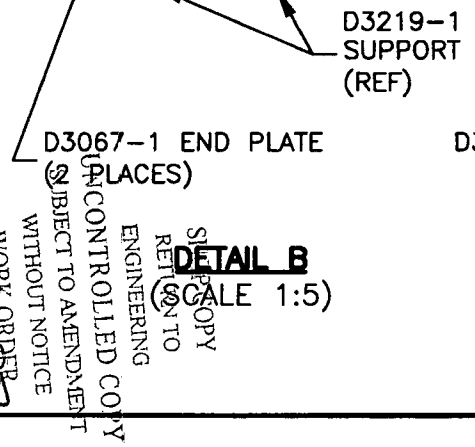
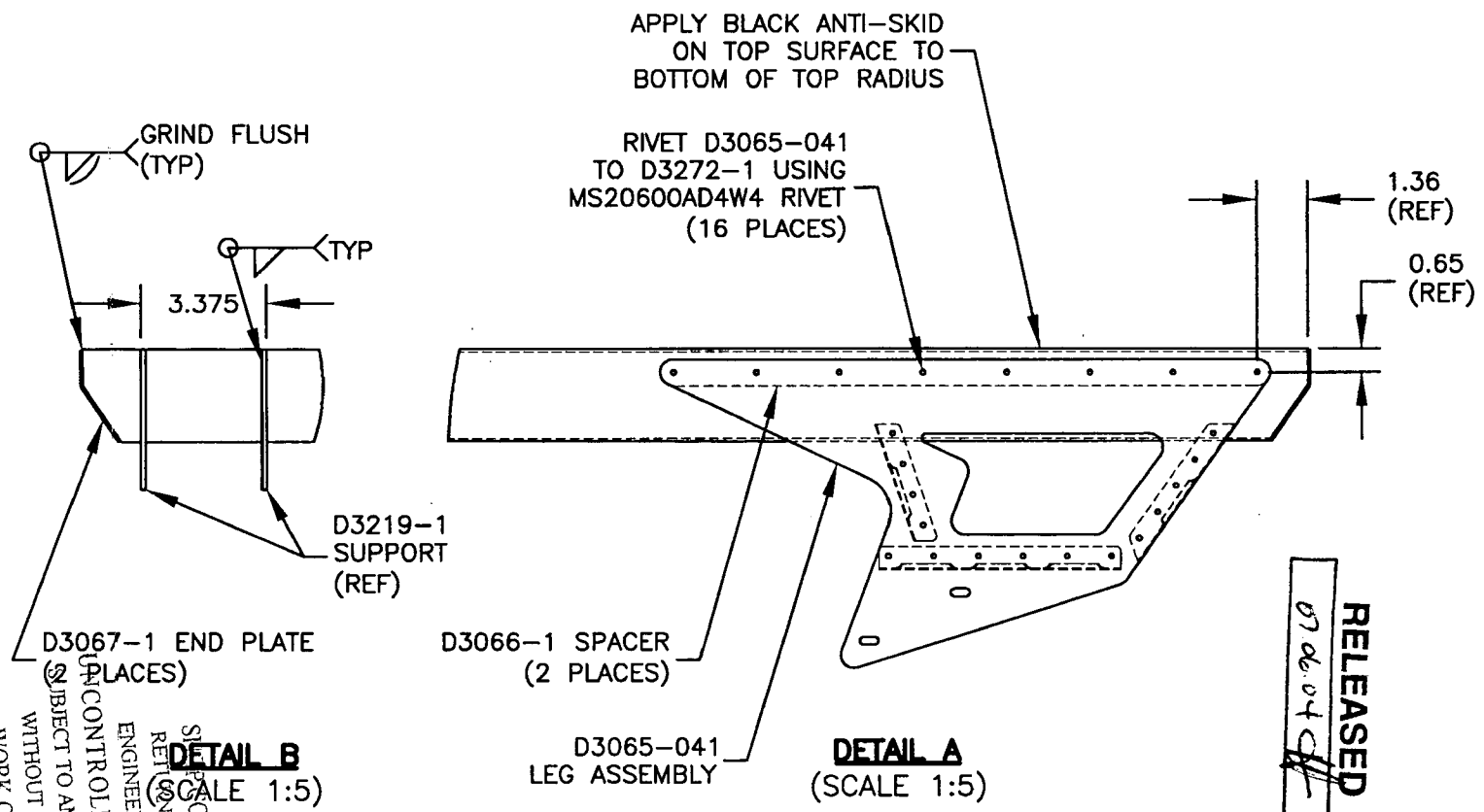
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CHECKED	CE	APPROVED	CE	REV. B
DATE	07.05.18	DRAWING NO.	D3272	SHEET 2 OF 3
		TITLE	STEP ASSEMBLY, HI LONG	SCALE
				1:20



D3272-041 STEP ASSEMBLY (LH. SHOWN)
D3272-042 STEP ASSEMBLY (RH, OPPOSITE)



DETAIL B
(SCALE 1:5)

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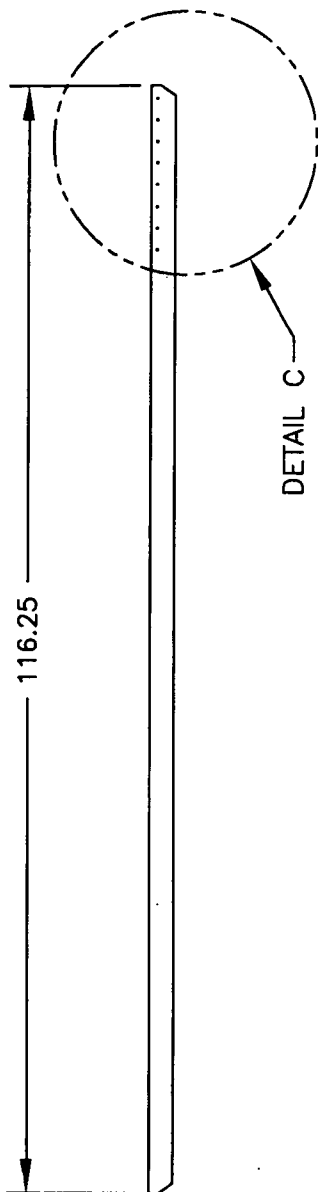
WORK ORDER NO. 35087



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CHECKED <i>CE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 3 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE 1:20

RELEASED

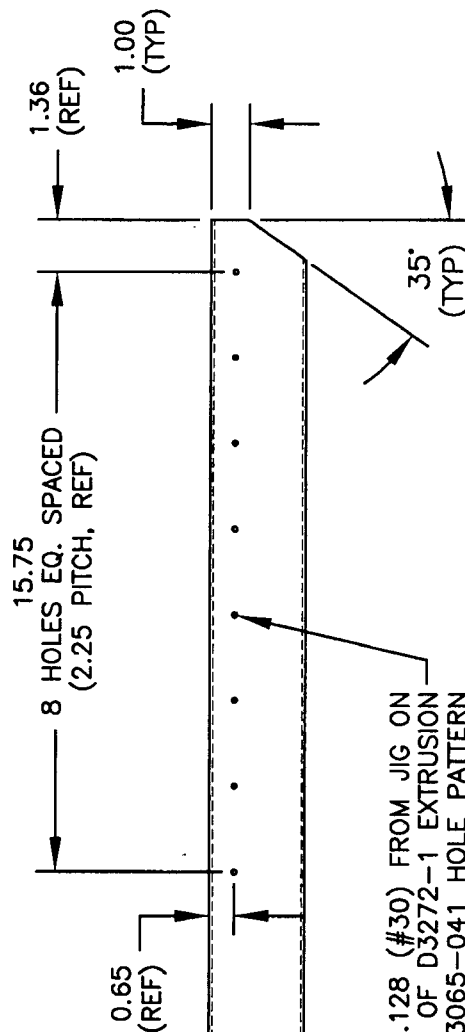
07.06.04 *[Signature]*



DETAIL C

B D3272-1 STEP

(MAKE FROM D2622-120 STEP EXTRUSION)



DRILL $\phi 0.128$ (#30) FROM JIG ON BOTH SIDES OF D3272-1 EXTRUSION TO MATCH D3065-041 HOLE PATTERN

DETAIL C
(SCALE 1:5)

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WORK ORDER
NO. 35087

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